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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,929	09/17/2003	Nischal Abrol	030142	6825
23696	7590	01/30/2008		
QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121			EXAMINER KARIKARI, KWASI	
			ART UNIT 2617	PAPER NUMBER
			NOTIFICATION DATE 01/30/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/665,929

Applicant(s)

ABROL ET AL.

Examiner

Kwasi Karikari

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-23 and 25-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9-23 and 25-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/31/2007 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1,3-7,9-23 and 25-33 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-6, 20-22, 28 and 31 are rejected under U.S.C. 102(e) as being anticipated by Madour (US 20030053431 A1), (hereinafter Madour).

Regarding claims 1 and 20, Madour discloses a wireless communication device

(= terminal 205, see Fig. 2) comprising:

a connection table for storing one or more connection identifiers, wherein a connection identifier corresponds to a Packet Coordination Function (PCF) that has been previously visited by the wireless communication device (= terminal stores PZID of visited PZ, see Pars. 0005, 0008, 0028-29 and 0031-32);

a receiver for receiving a connection identifier (see Pars. 0032 and 0034);

a processor for delivering the received connection identifier to the connection table for storing when the received connection identifier is not contained in the connection table (see Pars. 0032 and 0034); and

a transmitter for sending a registration in response to the received connection identifier when the received connection identifier is not contained in the connection table (see Pars. 0006-10, 0028-29, 0033-35 and 0037).

Regarding **claim 3**, as recited in claim 1, Bertrand discloses the wireless communication device further comprising a timer, wherein the processor removes a connection from the connection table in response to an expiration of the timer (see Pars. 0032, 0034 and 0037).

Regarding **claim 4**, as recited in claim 3, Madour discloses the wireless communication device wherein, wherein the processor resets the timer in response to transmission by the transmitter on the connection associated therewith (see Pars.

0007, 0029 and 0034).

Regarding **claim 5**, as recited in claim 3, Madour discloses the wireless communication device wherein, the processor clears the connection table when a connection is received corresponding to a Packet Data Serving Node (PDSN) that is different from a PDSN corresponding to a previously stored connection (see Pars. 0032, 0034 and 0037).

Regarding **claim 6**, as recited in claim 3, Madour discloses the wireless communication device wherein, the processor clears the connection table when a clear table message is received by the receiver (see Pars. 0032, 0034 and 0037).

Regarding **claim 21**, as recited in claim 20, Madour discloses the method further comprising: removing a connection from the connection table in response to expiration of an associated timer (see Pars. 0032, 0034 and 0037).

Regarding **claim 22**, as recited in claim 20, Madour discloses the method further comprising: receiving a clear table message; and clearing the connection table in response to the clear table message (see Pars. 0032, 0034 and 0037).

Regarding **claims 28 and 31**, Madour discloses an apparatus/processor, comprising: means for receiving a connection identifier (see Pars. 0032 and 0034);

means for storing the received connection identifier in a connection table when the connection is not contained in the connection table (= terminal stores PZID of visited PZ, see Pars. 0005, 0008, 0028-29 and 0031-32); and

means for registering a connection in response to a received connection not contained in the connection table (see Pars. 0006-10, 0028-29, 0033-35 and 0037).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 7,9-15, 23, 29, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertrand et al. (U.S 6,876,640), (hereinafter Bertrand) in view of Madour (US 6,834,050 A1), (hereinafter Madour).

Regarding **claims 7, 23, 29 and 32**, Bertrand discloses a Packet Data Serving Node (PDSN) /method, operable with a plurality of PCFs (RN 108) via a corresponding plurality of connections (112), each PCF operable to communicate with one or more wireless communication devices (102), the PDSN further operable with a network (118) for directing data for transmission to one or more wireless communication devices (see Fig. 1), comprising:

a connection table for storing a plurality of connection sets (= PPP register 126 could be any located any where in system 100, see col. 5, lines 50-67 and col. 6, lines 10-20), each connection set comprising one or more connections associated with a wireless communication device (= R-P interface and PPP connection, see Fig. 1);

a processor (= inherent feature of RN 108) for selecting a connection from the one or more connections in a connection set associated with a wireless communication device for which data is directed from the network (= complete negotiation of PPP context of PPP session, see col. 1, lines 65-66 and col. 8, lines 12-59); and

a buffer for receiving data from the network that is designated for delivery to a wireless communication device, storing the received data until the wireless communication device is located on one of the connections in the connection set and transmitting the stored data on the selected connection to the wireless communication device (see col. 1, line 65-67; col. 2, lines 49- col. 3, line 43); but fails to teach wherein a first timer in the PDSN and a second timer in the wireless communication device

correspond to each of the connections and wherein the first timer is set to expire after the second timer.

However, Madour teaches "wherein a first timer in the PDSN and a second timer in the wireless communication device correspond to each of the connections and wherein the first timer is set to expire after the second timer (see col. 3, lines 37-54 and col. 6, lines 27-50).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Madour with the system of Bertrand for the benefit of achieving a system that includes hash function of system selection (see col. 4, lines 60-65).

Regarding **claim 9**, as recited in claim 7, Bertrand discloses the Packet Data Serving Node (PDSN), wherein an active connection identifier is stored in the connection table to identify zero or one active connection for each wireless communication device (see col. 6, lines 43-64).

Regarding **claim 10**, as recited in claim 9, Bertrand discloses the Packet Data Serving Node (PDSN), wherein the processor selects all of the connections associated with a wireless communication device for transmission to the wireless communication device when no connection for the wireless communication device is identified as active (= creation of new session, see col. 6, lines 43-64).

Regarding **claim 11**, as recited in claim 9, Bertrand discloses the Packet Data Serving Node (PDSN), wherein the processor selects a subset of the connections associated with a wireless communication device for transmission to the wireless communication device when no connection for the wireless communication device is identified as active (see col. 6, lines 43-64).

Regarding **claim 12**, as recited in claim 9, Bertrand discloses the Packet Data Serving Node (PDSN), wherein the processor selects the most recent active connection from the connections associated with a wireless communication device for transmission to the wireless communication device when no connection for the wireless communication device is identified as active (= previous PPP context are used, see col. 7, lines 1-19).

Regarding **claim 13**, as recited in claim 9, Bertrand discloses the Packet Data Serving Node (PDSN), wherein the processor selects one or more connections randomly from the connections associated with a wireless communication device for transmission to the wireless communication device when no connection for the wireless communication device is identified as active (see col. 7, line 57- col. 8, lines 34).

Regarding **claim 14**, as recited in claim 7, Bertrand discloses the Packet Data Serving Node (PDSN), further comprising a plurality of timers corresponding to the plurality of stored connections, wherein the processor removes a connection from the connection table upon expiration of one of the plurality of timers associated with the connection

(col. 7, lines 32-56).

Regarding **claim 15**, as recited in claim 14, Bertrand discloses the Packet Data Serving Node (PDSN), wherein the processor resets one of the plurality of timers in response to an activity indicator associated with the mobile station on the corresponding connection (see col. 6, lines 43- 64).

5. Claims 16-19, 25-27, 30 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertrand in view of Madour (US 20030053431 A1), (hereinafter Madour II).

Regarding **claims 16, 26, 30 and 33**, Bertrand a Packet Coordination Function (PCF)/method, operable with a PDSN and a plurality of wireless communication devices, comprising:

a connection identifier (connection between 102,108 and 120 and PPP connection for PPP session see col. 3, line 65- col. 4, line 48);

a receiver for receiving a transmission from a wireless communication device; wherein the wireless communication device includes a connection table

(= message 202 is sent to RN 108; and PPP registers 126 are shown as standalone nodes, the registers can be located anywhere in the system 100 and can be co-located with other part of system 100 (see col. 4, line 49- col. 5, line 38; col. 5, line 59- col. 6, line 42 and col. 7, lines 63-67);

a processor (inherent) for establishing a connection with the PDSN associated with the wireless communication device in response to a received transmission containing a registration; wherein the received transmission includes the registration in response to the connection identifier when the connection identifier is not included in the connection table (= setting up PPP session between 102 and 120, see col. 7, line 63- col. 8, line 34; and col. 4, lines 26-35; col. 6, lines 43-64 8, line 34 and Fig. 1 (PPP connection)).

a first transmitter for sending an inactive message to the PDSN on the connection when a pre-determined time period has lapsed since a transmission is received from the mobile station (see col. 7, lines 32-56 and col. 5, lines 59-67); but fails to teach "wherein the connection table stores the connection identifier if the PCF has been previously visited by the wireless communication device".

However, Madour II teaches "wherein the connection table stores the connection identifier if the PCF has been previously visited by the wireless communication device" (see Pars. 0005, 0008, 0028-29 and 0031-32).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Madour with the system of Bertrand for the benefit of achieving a system that includes updatable memory in the terminal (see Pars. 0034 and 0037).

Regarding **claims 17 and 27**, as recited in claims 16 and 26, Bertrand discloses that the Packet Coordination Function (PCF), further comprising a second transmitter for transmitting a clear table message to the wireless communication device when the

PDSN is different from a PDSN identified in a received transmission from the wireless communication device (see col. 8, line 60- col. 9, line 38).

Regarding **claim 18** wireless communication system, comprising:

a wireless communication device (102) for receiving a connection identifier (PPP session) storing the received connection identifier in a connection table, and transmitting a registration when the received connection is not contained in the connection table (col. 6, lines 10-23);

a Packet Coordination Function (PCF) (RN 108) for receiving a transmission from the wireless communication device and initiating a PDSN connection in response to a received transmission containing a registration (col. 7, line 57- col. 8, line 11); and

a Packet Data Serving Node (PDSN) (120) for establishing a PDSN connection with the PCF, associated with the wireless communication device (102), in response to a PDSN connection initiation, storing the connection in one of a plurality of connection (col. 8, lines 12-34) sets in a connection table, each connection set comprising one or more connections associated with a wireless communication device (col. 7, line 57- col. 8, line 34; and col. 5, lines 59-67); but fails to teach "wherein the connection table stores the connection identifier if the PCF has been previously visited by the wireless communication device".

However, Madour II teaches "wherein the connection table stores the connection identifier if the PCF has been previously visited by the wireless communication device"

(see Pars. 0005, 0008, 0028-29 and 0031-32).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Madour with the system of Bertrand for the benefit of achieving a system that includes updatable memory in the terminal (see Pars. 0034 and 0037).

Regarding **claim 19**, as recited in claim 18, Bertrand discloses the wireless communication system, wherein the PDSN further selects a connection from the one or more connections in a connection set associated with a wireless communication device for transmission of data directed to the wireless communication device (= PPP session, see col. 8, lines 12-34).

Regarding **claim 25**, as recited in claim 23, Bertrand discloses the method further comprising maintaining a plurality of timers corresponding to the plurality of stored connections and removing a connection from the connection table upon expiration of one of the plurality of timers associated with the connection (col. 7, lines 32-56).

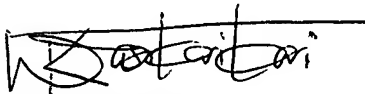
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is 571-272-8566. The examiner can normally be reached on M-F (8 am - 4pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Rafael Pérez-Gutiérrez* can be reached on 571-272-7915. The fax phone

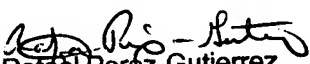
Application/Control Number:
10/665,929
Art Unit: 2617

Page 13

number for the organization where this application or proceeding is assigned is 571-273-8566. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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